

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A liquid crystal display device comprising: a sealing material provided on a periphery of a substrate for preventing leakage of liquid crystal, projections formed by etching a film formed on the substrate, and another substrate opposing the substrate being remote therefrom by a gap and being supported by the projections, wherein an area occupying ratio of the projections with respect to a region enclosed by the sealing material is not less than 0.001 and not more than 0.003.

Claim 2 (Previously Presented): The liquid crystal display device of Claim 1, wherein the area occupying ratio is not less than 0.001 and not more than 0.002.

Claim 3 (Previously Presented): The liquid crystal display device of Claim 1, wherein the area occupying ratio is not less than 0.001 and not more than 0.0015.

Claim 4 (Original): The liquid crystal display device of any one of Claims 1-3, wherein the film is formed of acrylic resin.

Claim 5 (Currently Amended): The liquid crystal display device of Claim 1, wherein heights of projections are varied during manufacture of the device.

Claim 6 (Previously Presented): The liquid crystal display device of Claim 5, wherein the heights are different by not less than 0.05  $\mu\text{m}$ .

Claim 7 (Previously Presented): The liquid crystal display device of Claim 5, wherein the heights are different by not less than 0.05  $\mu\text{m}$  and not more than 0.2  $\mu\text{m}$ .

Claim 8 (Previously Presented): A method for manufacturing liquid crystal display device comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates.

Claim 9 (Previously Presented): The method of claim 8, wherein a sealing agent is applied to the liquid crystal injection inlet simultaneously with applying pressure to the surfaces of both substrates.

Claim 10 (Previously Presented): A method for manufacturing a liquid crystal display device comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal.

Claim 11 (Previously Presented): The method of Claim 10, wherein the specified time is not less than 30 minutes and not more than 60 minutes.

Claim 12 (Previously Presented): A method for manufacturing liquid crystal display device comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.001 and not more than 0.003; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates.

Claim 13 (Previously Presented): A method for manufacturing a liquid crystal display device comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.001 and not more than 0.003; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the seal agent; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal.

Claim 14 (Currently Amended): A liquid crystal display device of a transverse field method comprising: a sealing material provided on a periphery of a substrate for preventing leakage of liquid crystal, projections formed by etching a film formed on the substrate, and another substrate opposing the substrate being remote therefrom by a gap and being supported by the projections, wherein an area occupying ratio of the projections with respect to a region enclosed by the sealing material is not less than 0.001 and not more than 0.003, and heights of projections are varied during manufacture of the device.

Claim 15 (Previously Presented): The liquid crystal display device of Claim 14, wherein the heights are different by not less than 0.05  $\mu\text{m}$ .

Claim 16 (Previously Presented): The liquid crystal display device of Claim 14, wherein the heights are different by not less than 0.05  $\mu\text{m}$  and not more than 0.2  $\mu\text{m}$ .

Claim 17 (Currently Amended): A liquid crystal display device of a transverse field method comprising: a sealing material provided on a periphery of a substrate for preventing leakage of liquid crystal, projections formed by etching a film formed on the substrate, and another substrate opposing the substrate being remote therefrom by a gap and being supported by the projections, wherein an area occupying ratio of the projections with respect to a region enclosed by the sealing material is not less than 0.0014 and not more than 0.0029, and height of projections are varied by not less than 0.05  $\mu\text{m}$  and not more than 0.2  $\mu\text{m}$  during manufacture of the device.

Claim 18 (Previously Presented): A method for manufacturing liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed

on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates, wherein a sealing agent is applied to the liquid crystal injection inlet simultaneously with applying pressure to surfaces of both substrates.

Claim 19 (Previously Presented): A method for manufacturing a liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal.

Claim 20 (Previously Presented): The method of Claim 19, wherein the specified time is not less than 30 minutes and not more than 60 minutes.

Claim 21 (Previously Presented): A method for manufacturing liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.001

and not more than 0.003; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates.

Claim 22 (Previously Presented): A method for manufacturing a liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.001 and not more than 0.003; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the seal agent; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal, the specified time being not less than 30 minutes and not more than 60 minutes.

Claim 23 (Previously Presented): A method for manufacturing a liquid crystal display of a transverse field method device comprising: forming projections by etching a film formed on a substrate, heights of projections being varied by not less than 0.05  $\mu\text{m}$  and not more than 0.2  $\mu\text{m}$ ; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.0014 and not more than 0.0029; overlapping another substrate onto the substrate with the projections and

the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal, the specified time being not less than 30 minutes and not more than 60 minutes.

Claim 24 (Previously Presented): A method for manufacturing liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed on a substrate, heights of projections being varied by not less than  $0.05\ \mu\text{m}$  and not more than  $0.2\ \mu\text{m}$ ; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.0014 and not more than 0.0029; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates.

DISCUSSION OF THE AMENDMENT

Claims 5, 14 and 17 have been amended to recite that the heights of projections are varied --during manufacture of the device--, as supported in the specification at page 17, line 4ff.

No new matter is believed to have been added by the above amendment. Claims 1-24 remain pending in the application.